DOCUMENT RESUME

ED 169 403 CG 013 320

AUTHOR Layden, Mary Anne; Ickes, William J.
TITLE Self-Esteem and Sex Differences in Attributional Style: Effect Upon Performance.
PUB DATE 77
NOTE 15p.; Paper presented at the Annual Convention of the American Psychological Association (86th, Toronto, Ontario, Canada, August, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attribution Theory; College Students; Comparative Analysis; *Individual Characteristics; *Locus of Control; *Performance Factors; *Self Esteem; *Sex Differences; Task Performance

ABSTRACT

The connection between self-esteem, sex, and attributional style was examined in two studies. Results indicated that for positive events, high self-esteem subjects make more internal attributions than low self-esteem subjects, and for negative events, high self-esteem subjects make fewer internal attributions than low self-esteem subjects. The effect of attributional style, self-esteem, and sex upon performance was tested in a third study which controlled factors of self-esteem and attributional style. Results indicated that after failure in working on insoluble anagrams, internalizers and females showed a decrease in speed and accuracy. There were no differences for groups who differed in self esteem. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED169403

Self-esteem and Sex Differences in Attributional Style: Effect upon Performance

Mary Anne Layden and William J. Ickes
University of Wisconsin - Madison

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M A Layden

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM"

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Paper presented at the 85th Annual Convention of the American Psychological Association, San Francisco, 1977.

CG 013320

CN000 527
6/14/78

A number of studies have found that high and low self-esteem subjects differ in their response to success and failure experiences (Shrauger & Rosenberg, 1970; Maracek & Mettee, 1972; Ryckman & Rodda, 1972; Cruz Perez, 1973). Success feedback tends to increase the performance and the future expectancies for success of high self-esteem subjects but not for low self-esteem subjects. On the other hand, failure feedback, decreases the performance and future expectancies of low self-esteem subjects but not high self-esteem subjects.

Differences in attributions for success and failure experiences also seem to exist for groups who differ in self-esteem, though these differences have not always been described in attributional terms. Solley & Stagner (1956) recorded the spontaneous remarks of high and low self-esteem subjects and found that high self-esteem subjects when confronted with insoluble anagrams made remarks which indicated that they were externalizing the cause of the failure (e.g., Is this a word? Is this English?) whereas low self-esteem subjects confronted with the same experience, indicated that they internalized the cause of the failure (e.g., I must be stupid). Fitch (1970) found that for failure on a laboratory task, low self-esteem subjects made more internal attributions than high self-esteem subjects. For a success experience, low self-esteem subjects made fewer internal attributions though this effect was not significant.

A number of studies have revealed that performance and attributional differences exist for males and females also. Successful performance is seen as more appropriate for males, and males have a higher expectancy for success than females. Feather and Simon (1975) found that subjects rated professionals who failed as more

feminine than those who succeeded regardless of the sex of the individual or the sex-typing of the profession involved. A number of studies (Crandall, 1969; Deaux and Farris, 1974; Deaux and Emswiller, 1974; Deaux, White and Farris, 1975; Feather, 1969; Montanelli and Hill, 1969) have shown that males have a higher expectancy of success than do females over a wide range of skill and achievement type tasks.

Higher expectancy for success may also lead males to greater persistence on skill tasks, as suggested by the research of Battle(1965) and Crandall(1969). More recently, Deaux, White & Farris (1975) found that males more often choose skill games and persist at these longer even when failing than do females.

Deaux & Emswiller (1974) found a bias to see good performance by males as due to skill regardless of the sex typing of the task. Deaux & Farris (1974) had previously reported that when performance is expected (as success apparently is with males) internal-stable ratings tend to be higher.

These studies suggest that competence, expectancy of success and persistence in the face of failure are not only high self-esteem traits but are also typically seen as masculine attributes. As might be expected, self-esteem differences have been found for males and females. Spence, Helmreich and Stapp (1975) found that high self-esteem was associated more frequently with masculine sex-typing than with feminine sex-typing. Wetter (1975) replicated this finding. Males had higher self-esteem than females; moreover, male-sex-role-identified subjects had higher self-esteem than female-sex-role-identified subjects regardless of the sex of the subject.

The literature on self-esteem and sex differences just reviewed suggest some interesting patterns of results but a number of important questions remain unanswered. (1) Two studies were undertaken to clarify the self-esteem and sex differences in attributional style not just on one laboratory task but on

a wide range of situations. (2) A third study examined the independent effects of attributional style, self-esteem and sex upon the performance of subjects who have just experienced failure. A number of hypotheses are proposed for these three studies: (1) high self-esteem subjects more often internalize success outcomes than low self esteem subjects; (2) high self-esteem subjects less often internalize failure outcomes than low self-esteem; (3) males' attributional pattern will resemble high self-esteem subjects; females will respond like low self-esteem subjects; and (4) the performance decrement often observed for low self-esteem subjects after failure is a function of internalizing the cause of that failure and not of self-esteem per se.

Study 1

Method

Subjects were 267 male and 339 female introductory psychology students at the University of Wisconsin. Subjects were asked to complete an adult revision of the Coopersmith Self-Esteem Inventory (1959) developed by Morse and Gergen (1970) and an attributional style questionnaire that asked subjects to pick the most probable cause for hypothetical situations with positive and negative outcomes in areas such as competence, interpersonal relationships, morals and moods. A 2x3x2x2x2 analysis of variance was performed with sex (male or female), and self-esteem (high, moderate or low) as between-subjects variables and locus of causality (internal and external), stability of cause (stable and unstable), and valence of outcome (positive and negative) as within-subjects variables.

Results

In general, subjects tended to perceive positive outcomes as internally-caused and negative outcomes as externally caused, F (1, 601) = 128.19, $p < .001$.

However, this attributional pattern interacted with self-esteem, F (1, 601) = 33.51, $p < .001$. The tendency to see positive events as internally-caused increased as self-esteem increased, whereas the tendency to see negative outcomes as internally-caused decreased as self-esteem increased (Table 1). The scores of the moderate self-esteem subjects consistently fell between that of the low and high self-esteem groups.

Study 2

Method

Subjects were 238 male and 268 female introductory psychology students. This study is essentially a replication of the study just reported and the procedure was similar in most respects. The only changes that did occur were in the attributional style questionnaire. It was expanded to twice its original length (from 12 to 24 items) and the response format changed from picking the most probable of the causes offered to rating the probability of all the causes.

Results

As in Study 1, the tendency was to see positive outcomes as internally caused and negative outcomes as externally caused, F (1, 500) = 498.49, $p < .001$. This effect was modified by an interaction with self-esteem with high self-esteem subjects viewing the internal causes for positive outcomes as more probable than low self-esteem subjects. Unlike Study 1, however, for negative items, high self-esteem subjects rated all causes as less probable than did low self-esteem subjects, F (2, 500) = 15.26, $p < .001$ (Table 2).

This study also revealed sex differences that resembled the self-esteem differences, F (1, 500) = 35.76, $p < .001$. Males, like high self-esteem subjects,

Table 1

Number of Internal (I) and External (E) Attributions Made for Positive (+) and Negative (-) Outcomes by High, Moderate and Low Self Esteem Subjects

	+I	+E	-I	-E
High	3.96	2.04	2.20	3.79
Mod	3.65	2.35	2.65	3.35
Low	3.37	2.63	3.28	2.73
Total	3.65	2.35	2.67	3.33

Table 2

Probability Rating of Internal (I) and External (E) Attributions Made for Positive (+) and Negative (-) Outcomes by High, Moderate and Low Self Esteem Subjects

	+I	+E	-I	-E
High	32.40	28.33	20.42	24.61
Mod	31.54	28.51	22.01	25.66
Low	30.41	29.02	23.96	26.71
Total	31.45	28.60	22.14	25.69

Table 3

Probability Rating of Internal (I) and External (E) Attributions Made for Positive (+) and Negative (-) Outcomes by High, Moderate and Low Self Esteem Subjects Separated by Sex

	+I	+E	-I	-E
Low self esteem females	30.20	29.04	25.04	27.48
Low self esteem males	30.73	28.25	22.39	25.58
Mod self esteem females	30.72	29.00	23.63	26.11
Mod self esteem males	32.39	28.00	20.34	25.20
High self esteem females	32.40	29.29	21.57	25.43
High self esteem males	32.39	27.35	19.25	23.78
Total females	30.95	29.23	23.58	26.35
Total males	32.02	27.89	20.53	24.93

saw the internal causes for positive events as more probable and saw all causes for negative items as less probable than did females. This effect did not interact with self-esteem, F (2, 500) = 2.01, n.s. Thus at each level of self-esteem, the male score was in the direction of the high self-esteem pattern and the female score was in the direction of the low self-esteem pattern (Table 3).

Study 3

Method

This study was undertaken to determine the independent effects of attributional style, self-esteem, and sex upon performance. Twenty male and twenty female students were divided inot eight groups based upon three two-level factors: sex (male or female), attributional style for negative outcomes (internal or external, and self-esteem (high or low).

Subjects were asked to work on two series of anagrams. The first series (pretest) was made up of soluble anagrams. The second series began with insoluble anagrams and this constituted the failure experience. This second series ended with soluble anagrams and this made up the posttest. The subject's pretest score was compared to his posttest score in order to determine the effect of the intervening failure experience upon performance. A 2x2x2x2 analysis of variance was performed with sex, attributional style and self-esteem as between-subjects factors and sessions (pretest and posttest) as a within-subjects factor.

Results

An analysis of variance of pretest speed per anagram and pretest number incorrect indicated that there were no effects for self-esteem, attributional style, or sex. It was therefore concluded that the groups were initially equated for skill at the task (all F's < 1).

An analysis of variance of pretest/posttest performance of number incorrect and mean speed per anagram was performed. For number incorrect, there was no significant effect for self-esteem, $F < 1$; A significant effect for attributional style, $F(1, 32) = 5.23$, $p < .05$; and a significant effect for sex, $F(1, 32) = 5.23$, $p < .05$. High and low self-esteem subjects showed a similar increase in number incorrect after failure; intenalizers but not externalizers and females but not males showed a significant increase in number incorrect after failure (Table 4).

A similar analysis to the one reported above was performed for average speed per anagram. Again, there was no effect for self-esteem, $F < 1$; and a significant effect for attributional style, $F(1, 32) = 5.92$, $p < .05$. The effect for sex approached significance, $F(1, 32) = 2.52$, $p < .15$. High and low self-esteem subjects were both slower after failure. Internalizers, but not externalizers, and females,but not males, were slower at solving anagrams after failure. (Table 5)

Discussion

Studies 1 and 2 indicated that high self-esteem subjects readily take responsibility for the occurrence of positive outcomes and ascribe the cause to internal factors; low self-esteem subjects much less readily have these perceptions. For negative events, high self-esteem subjects either ascribe the cause to external factors or rate all factors as improbable for failure; low self-esteem subjects are much more likely to take responsibility upon themselves for these outcomes. Because these perceptions are measured over a range of situations, it lends support to the notion that this is a cognitive set, a general tendency or bias to respond in such a manner.

This cognitive set may be a very helpful strategy for high self-esteem subjects to adopt in order to preserve high self-esteem but for the low self-esteem subject, the typical style employed seems particularly disadvantageous.

Table 4

Pretest/Posttest Number Incorrect for Groups Differing in Self-Esteem, Attributional Style, and Sex

Self-esteem	Pre	Post
High	1.35	1.70
Low	1.25	1.80

Attributional Style	Pre	Post
Int	1.35	2.15
Ext	1.25	1.35

Sex	Pre	Post
Females	1.35	2.15
Males	1.25	1.35

Table 5

Pretest/ Posttest Mean Speed Per Anagram for Groups Differing in Self-Esteem, Attributional Style, and Sex

Self-esteem	Pre	Post
High	55.22	60.31
Low	50.93	59.26

Attributional Style	Pre	Post
Int	54.24	68.61
Ext	53.05	54.78

Sex	Pre	Post
Females	53.10	64.79
Males	53.05	54.78

Those for whom success appears to be a lucky accident while failure seems to be caused by stable personality traits, must have enormous difficulty maintaining any substantial amount of positive self affect. The strategy of internalizing failure combined with externalizing success appears so incompatible with high self-esteem that in Study 1 only one subject of the 606 who were tested showed a high degree of all three factors.

The results that indicate that males have adopted a high self-esteem pattern of attributional style and that females have adopted a low self-esteem pattern may be disquieting but they should not be surprising. Other research carried out by Layden and Ickes (unpublished data, 1975) has indicated that masculine sex role identification is highly correlated (about .50 for a sample of 500) with self-esteem. It is possible that this attributional style is a part of the sex-role identification that is trained in the child. It is unsettling to consider the possibility that for half of the population the expectations and training of significant others, if absorbed, may lead to lowered self evaluation but if not absorbed may lead to negative evaluation from others -- a classic no-win situation!

Results from Study 3 indicate that when attributional style is held constant, high and low self-esteem groups do not evidence differences in performance after a failure experience. When self-esteem is held constant, however, internalizers of failure show a decrease in speed and accuracy after failure which is not found in the data of the subjects who externalize failure.

The findings that high and low self esteem groups did not respond differently to failure may at first appear surprising in light of the studies reviewed earlier that did report such a finding. It was not the purpose of the present study to deny those earlier findings but only to clarify them. It must be remembered that in previous research a random sample of high and low self-esteem subjects

were used. No attempt was made to measure the attributional style of these subjects or to control for its effects. Results from Study 1 indicated that drawing a random sample of high self-esteem subjects also renders a sample of subjects who externalize failure; a random sample of loe self-esteem subjects contains a majority of subjects who internalize failure. It was this confounding of self-esteem and attributional style which caused previous findings to be interpreted as self-esteem differences when they actually represented attributional effects.

As in Study 2, sex differences were found which were manifested in this study as performance differences. Females' performance decreased after failure while males' performance did not. It is possible that females defined successful performance on this task as inappropriate to their sex role definition which could explain poorer performance. However, this is not a likely explanation since the performance of the females was initially equal to that of the males and did not show any deficit until after the negative experience of failure. It is too early to answer the speculation that this differential responsiveness to feedback may underlie any other of the performance differences seen between males and females.

The results of this research may have relevance for anyone in a position to judge performance and to give feedback (e.g., teachers, parents, supervisors). Feedback is a crucial factor in performance and divergent response may occur depending upon the type of feedback given and the subject who receives it. For those who wish to increase performance or self evaluation in others, it should be clear that negative feedback is not universally effective. In fact, in many cases it is dramatically counterproductive to their goals of improving performance and esteem. Special attention must be given before negative feedback is given to low self-esteem individuals, those who internalize failure or females to avoid unwanted effects.

REFERENCES

Battle, E. Motivational determinants of academic task persistence. Journal of Personality and Social Psychology, 1965, 2, 209-218.

Coopersmith, S. Antecedents of Self-Esteem, San Francisco, Freeman, 1959.

Crandall, V. Sex differences in expectancy of intellectual and academic reinforcement. In C. P. Smith (Ed), Achievement-related motives in Children. New York: Russell Sage, 1969.

Cruz Perez, R. The effects of experimentally induced failure, self-esteem and sex on cognitive differentiation. Journal of Abnormal Psychology, 1973, 81, 74-79.

Deaux, K, & Emswiller, T. Explanations of successful performance on sex-linked tasks: what is skill for the male is luck for the female. Journal of Personality and Social Psychology, 1974, 29, 80-85.

Deaux, K., & Farris, E. Attributing causes for one's own performance: The effects of sex, norms and outcomes. Unpublished manuscript, Purdue University, 1974.

Deaux, K., White, L., & Farris, E. Skill vs. luck: Field and laboratory studies of male and female preferences. Journal of Personality and Social Psychology, 1975, 32, 629-636.

Dweck, C. S. The role of expectations and attributions in the alleviation of learned helplessness. Journal of Personality and Social Psychology, 1975, 31, 674-685.

Feather, N. T. Attribution of responsibility and valence of success and failure in relation to initial confidence and task performance. Journal of Personality and Social Psychology, 1969, 13, 129-144.

Feather, N.T. & Simon, J. G. Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions and perceived likelihood of differnet consequences. Journal of Personality and Social Psychology, 1975, 31, 20-31.

Fitch, G. Effects of self-esteem, perceived performance and choice on causal attributions. Journal of Personality and Social Psychology, 1970, 16, 311-315.

Maracek, J. and Mettee, D. Avoidance of continued success as a function of self-esteem, level of certainty and responsibility for success. Journal of Personality and Social Psychology, 1972, 22, 98-107.

Montanelle, D. S. & Hill, K. T. Children's achievement expectations and performance as a function of two consecutive reinforcement experiences, sex of subject, and sex of experimenter. Journal of Personality and Social Psychology, 1969, 13, 115-128.

Morse, S. & Gergen, K. Social comparison, self-consistency and the concept of self. Journal of Personality and Social Psychology, 1970, 16, 148-156.

Ryckman, R. & Rodda, W. Confidence maintenance and performance as function of chronic self-esteem and intial task experience. Psychological Record, 1972, 22, 241-247.

Shrauger, J. & Rosenberg, S. Self-esteem and the effects of success and failure feedback on performance. Journal of Personality, 1970, 38, 404-417.

Solley, C.M. & Stagner, R. Effect of magnitude of temporal barriers, type of goal and perception of self. Journal of Experimental Psychology, 1956, 51, 62-70.

Spence, J. T., Helmreich, R., & Stapp, J. Ratings of self and peers on sex role attributes and their relations to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 1975, 32, 29-39.

Weiner, B. & Sierad, J. Misattribution ofr failure and enhancement of achievement of achievement strivings. Journal of Personality and Social Psychology, 1975, 31, 415-421.

Wetter, R. Levels of self-esteem associated with four sex role categories. Paper presented at the 83rd annual meeting of the American Psychological Association, Chicago, Illinois, August 30, 1975.